15 min. (Plate II, 1). The clutch of 11 eggs was completed by 11 hours 28 min. 30 sec. The eggs were laid in one heap, one on top of another. Then she arranged them side by side in the pit so that they did not overlap each other, replaced the soil with her forelimbs, and patted it down with her hindlimbs and snout.

On the 31st the female was covered by a male. The details of the courtship and the method of pairing will be dealt with in a separate communication. On the 10th September the female was noticed to be gravid. On the 17th morning she prepared another pit as before and between 10 hours 54 min. and 11 hours 5 min. laid a clutch of 13 eggs.

During the 3rd and 4th weeks of September the male was seen chasing the female but copulation was not observed. As she showed signs of being gravid in the 1st week of October copulation must have taken place. In the morning of the 10th October between 11 hours 16 min. 30 sec. and 11 hours 26 min. 38 sec. she laid a clutch of 14 eggs.

Thus, within a period of 41 days the female laid 38 eggs.

The eggs are small, ellipsoid in shape, with a soft chalky white shell (Plate II, 2). They are free, not stuck together as is often the case with reptile eggs. The average dimensions as measured from the last clutch was 10 mm.×6 mm. According to Smith (FAUNA OF BRITISH INDIA, REPTILES **2** : 146) the clutch size is 6 to 8 eggs.

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WESTERN REGIONAL STATION, R. N. CHOPRA
POONA 5,
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8. A FIRST RECORD OF BREEDING COLOUR CHANGES IN A TORTOISE

Colour changes associated with the breeding season have never been reported in turtles. Thus a note on the presence of such changes in *Geochelone travancorica* (Boulenger) is worthy of publication.

The colour changes accompanying the breeding season in this species (November through January) are found in both males and females, though decidedly more noticeable in the former. These changes involve the eyelids and particularly the skin covering the remainder of the orbital depression, as well as the nasal area—particularly that below the narial openings.

In adult specimens of *Geochelone travancorica* these areas frequently possess a pinkish colour which is intensified during the breeding season. In breeding males these colours change to a fairly bright red, contrasting strongly with the remaining light yellow-brown of the remainder of the head.

Head movements during courtship in this species are believed to be unimportant in species identification. The change in colour is thus presumed to be caused by increased vascularization in the area of organs known to be important in sex and/or species recognition, i.e. the olfactory and visual organs. This vascularization may occur in other species of tortoises as well, but is so evident in *G. travancorica* because of the generally lightly-pigmented head.

FLORIDA STATE MUSEUM,
UNIVERSITY OF FLORIDA,
GAINESVILLE, FLORIDA,
February 29, 1964.

WALTER AUFFENBERG

9. DESCRIPTION OF A NEW SPECIES OF TOAD (ANURA : BUFONIDAE) FROM SATARA DISTRICT, MAHARASHTRA, INDIA[1]

(*With two plates*)

In early 1962 arrangements were made, with the co-operation of the Chief Engineer, Koyna Dam Project, Koyna, Satara District, Maharashtra, for the Society's personnel to visit the project area and collect reptiles and amphibians that might be flooded out when the water level rose during the monsoon. On information being received in July that the water level of the dam was rising, two assistants of the Society, P. W. Soman and P. B. Shekar, were sent to the dam area and while collecting on the crest of a hill, covered with vegetation and occasional pools, near Humbelevi village saw several small toads, some in amplexus. They had not in their experience seen breeding toads of such small size and a series was collected. On a subsequent visit on 1st September the toads were found in similar numbers among the grass and under stones in the same area; a large number of juveniles were also noted.

Examination of a series of these toads shows that they are distinct from the species of *Bufo* hitherto described.

[1] Manuscript posted from London 28th November 1963; received in the Society's Office 2nd December 1963.—EDS.